Pine Tree Engineering, Inc.

53 Front Street Bath, Maine 04530 (207) 443-1508 Fax: (207) 442-7029 E-mail: pte@pte-maine.com

October 29, 2009

Longitudinal Bracing Five Islands Wharf Georgetown, Maine

Scope of Work

The installation of longitudinal bracing will allow the existing wharf to adequately resist forces caused by vehicular traffic on the deck as well as those caused by wind or wave action on the wharf itself, the buildings it supports and vessels berthing at it's outer face. This bracing will not increase the load carrying capacity of the wharf rather it will allow the wharf to better handle those loads and reduce fatigue caused by the before mentioned forces acting on the wharf.

ITEM 1 - LONGITUDINAL BRACING

The wharf currently has no bracing in the longitudinal direction (running east/west). The contractor shall furnish all labor, materials and equipment necessary to provide and install longitudinal bracing on the existing wharf as shown on the plans.

Materials:

Lumber shall be grade 2 or better Southern Yellow Pine that is CCA pressure treated to 1.0 lbs./cubic foot as per AWPA standards.

All bolts, nuts and washers shall be hot dipped galvanized ASTM A123.

Procedure:

- 1. Install longitudinal bracing in locations as shown on the plans.
- 2. Alternate top/bottom connections between bracing rows and pile bents.
- 3. All connections to existing piles shall be thru bolted with bolts, nuts, and washers of 3/4" diameter minimum, bolts to be min. 3" from edge of brace.
- 4. Adequate blocking shall be installed where "X" bracing is required between the two outermost pile bents.
- 5. Do not notch either braces to be installed or existing piles to accept braces.